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TITLE: Transurethral ablation catheter

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Depicted in FIG. 32 is a cross-sectional view of elongated member tube 3510 of FIG. 31 taken along the line 37--37. Main longitudinal passageway 3684 extends the entire length of the catheter and is shown with the wire guide removed therefrom. Longitudinally extending balloon passageways 3680 and 3681 comprise supply means which communicate with the interior of distal fixation and cooling balloon 3503 for inflating the balloon and circulating a coolant therethrough. Longitudinally extending balloon passageways 3682 and 3683 also comprise supply means which communicate with the interior of proximal fixation and cooling balloon 3504 for inflating the balloon and circulating a coolant therethrough. The balloon passageways are at least 1 French (0.3 mm) in diameter. Longitudinally extending passageway 3533 is approximately 1 French (0.014") in diameter and contains the approximately 0.006" diameter, pair of insulated heat-emitting element lead wires 3534 and the four temperature sensor lead wires 3535. Alternatively, the lead wires need not be insulated, but are either embedded in the catheter wall or positioned in separate lumens. Longitudinal balloon passageways 3680 and 3681 are depicted as being diametrically opposed, as are longitudinal balloon passageways 3682 and 3683. Alternatively, longitudinal balloon passageways 3680-3683

and lead wire  
passageway 3533 are equally spaced about the circumference  
of the elongated  
member wall. Although two balloon passageways are depicted  
and preferred for  
continuous circulation of a coolant through a balloon, it  
is contemplated that  
only a single passageway is required for inflation of the  
balloon and  
nonsimultaneous aspiration and irrigation of the coolant.  
Circulating coolant  
fluid through the interior of the balloon, as used herein,  
includes the use of  
one or more passageways and either the simultaneous or  
nonsimultaneous  
aspiration and irrigation of coolant fluid.